Identifying the dialectal background of American Finnish speakers using a supervised machine-learning model.

**APPENDIX**

***Dialect Feature Distribution Tables***

These tables indicate the distribution of dialect features used in our model to categorize speech into the traditional seven Finnish dialect categories. While the same variant of a feature could be present across multiple different dialects, the cumulative combination of attested features for each dialect is distinctive.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | ***-ssA*** | ***-sA*** | ***-ss*** | ***-s*** | ***-hnA*** |
| Southwest |  | X |  | X |  |
| Southwest transitional |  |  | X | X |  |
| Häme | X | X | X | X |  |
| South Ostrobothnia |  | X |  | X | X |
| Central/North  Ostrobothnia |  | X | X |  |  |
| Far North | X | X | X |  |  |
| Savo | X |  | X |  |  |
| Southeast | X |  | X | X |  |

**Table A1: Inessive case.**

|  |  |  |  |
| --- | --- | --- | --- |
|  | ***-mme*** | ***-mmA*** | ***-VVn*** |
| Southwest | X |  |  |
| Southwest transitional | X |  |  |
| Häme | X |  | X |
| South Ostrobothnia |  | X |  |
| Central/North Ostrobothnia |  | X |  |
| Far North |  | X |  |
| Savo |  |  | X |
| Southeast |  | X | X |

**Table A2. Verb plural forms.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | ***Singular*** |  |  |  | ***Plural*** |  |  |
|  | ***minä*** | ***mä*** | ***mie*** | ***miä*** | ***me*** | ***myö*** | ***met*** |
| Southwest |  | X |  |  | X |  |  |
| Southwest transitional |  | X |  |  | X |  |  |
| Häme | X | X | X |  | X |  |  |
| South Ostrobothnia | X | X |  |  | X |  |  |
| Central/North Ostrobothnia | X | X |  |  | X | X |  |
| Far North | X | X | X |  |  |  | X |
| Savo | X | X | X | X |  | X |  |
| Southeast |  | X | X | X |  | X |  |

**Table A3. First person pronouns (singular & plural).**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | ***d*** | ***t*** | ***r*** | ***l*** | ***j* / absent** |
| Southwest | X | X | X |  |  |
| Southwest transitional | X | X | X | X |  |
| Häme | X | X |  | X |  |
| South Ostrobothnia | X | X | X |  |  |
| Central/North Ostrobothnia |  |  | X |  | X |
| Far North |  |  |  |  | X |
| Savo |  |  |  |  | X |
| Southeast |  |  |  |  | X |

**Table A4: *“d”* variable.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | ***ts*** | ***tt:tt*** | ***tt:t*** | ***ht*** | ***ss*** |
| Southwest |  |  | X |  |  |
| Southwest transitional |  | X |  |  |  |
| Häme |  | X |  | X |  |
| South Ostrobothnia |  | X |  | X |  |
| Central/North Ostrobothnia |  | X |  | X |  |
| Far North |  |  |  | X |  |
| Savo |  |  |  | X | X |
| Southeast | X |  | X |  | X |

**Table A5: *“ts”* variable.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | ***eA*** |  |  |  | ***OA*** |  |
|  | ***eA*** | ***iA*** | ***i(i)*** | ***ee*** | ***OA*** | ***UA*** |
| Southwest |  | X | X |  | X |  |
| Southwest transitional |  | X |  | X | X |  |
| Häme |  |  |  | X | X |  |
| South Ostrobothnia |  | X |  |  | X | X |
| Central/North Ostrobothnia |  | X |  |  | X | X |
| Far North | X | X |  |  | X | X |
| Savo | X |  | X | X | X |  |
| Southeast |  | X |  | X | X |  |

**Table A6: Word final -*eA* and -*OA.***

|  |  |  |
| --- | --- | --- |
|  | ***Schwa*** | ***Schwa following /h/*** |
| Southwest | - | - |
| Southwest transitional | - | - |
| Häme | - | - |
| South Ostrobothnia | + | + |
| Central/North Ostrobothnia | + | - |
| Far North | + | + |
| Savo | + | + |
| Southeast | - | - |

**Table A7: Intrusive schwa vowel.**